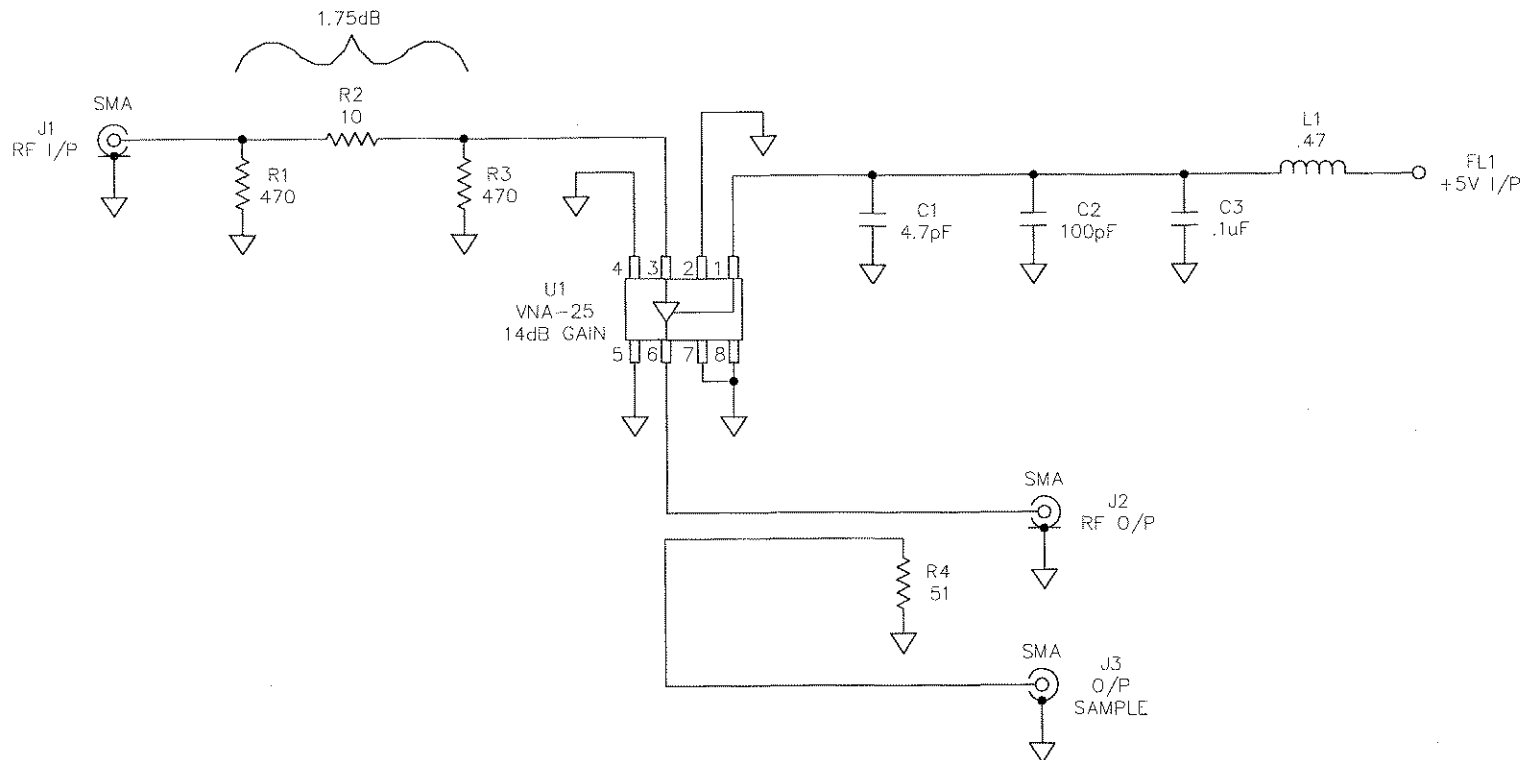




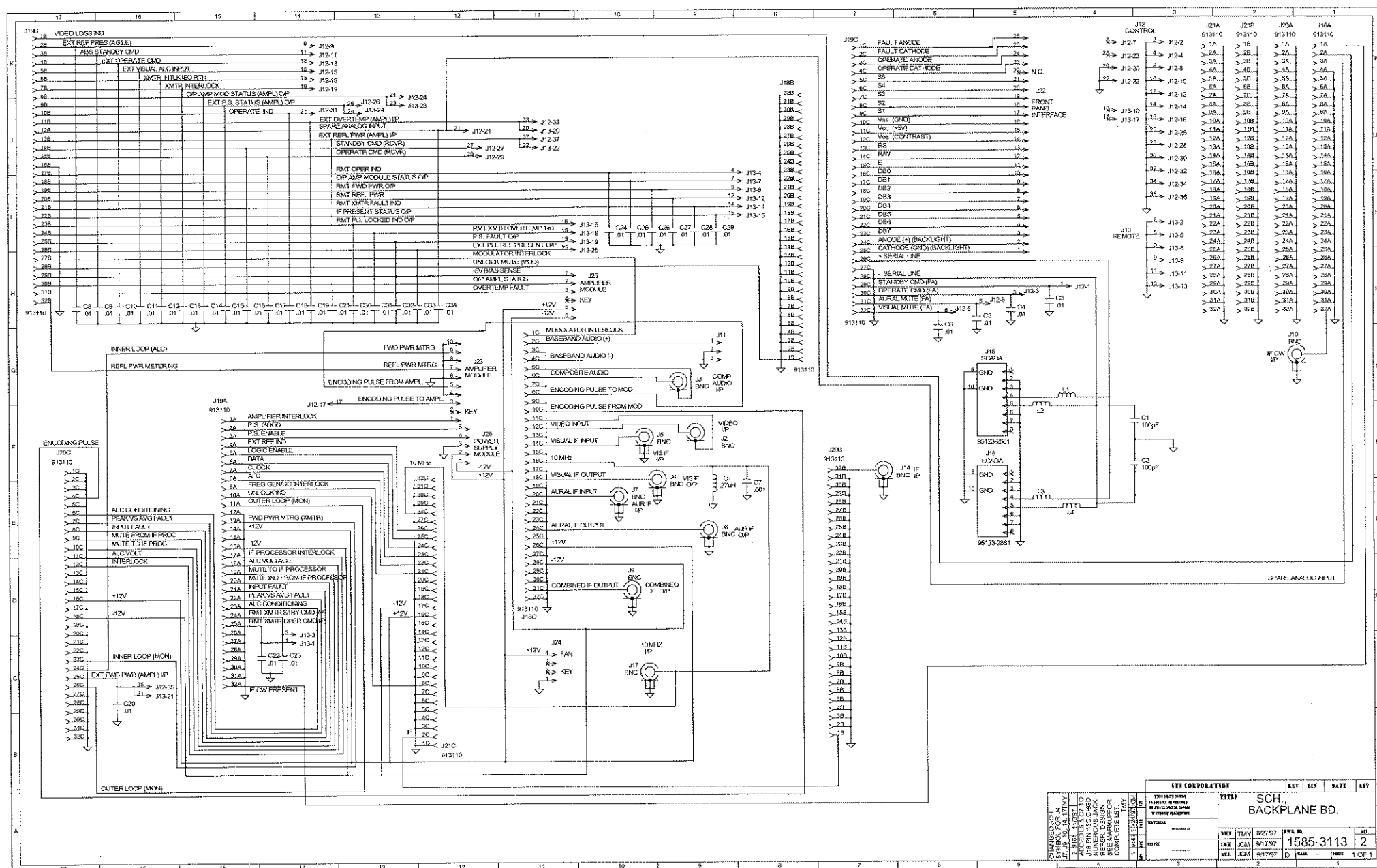
NOTE:

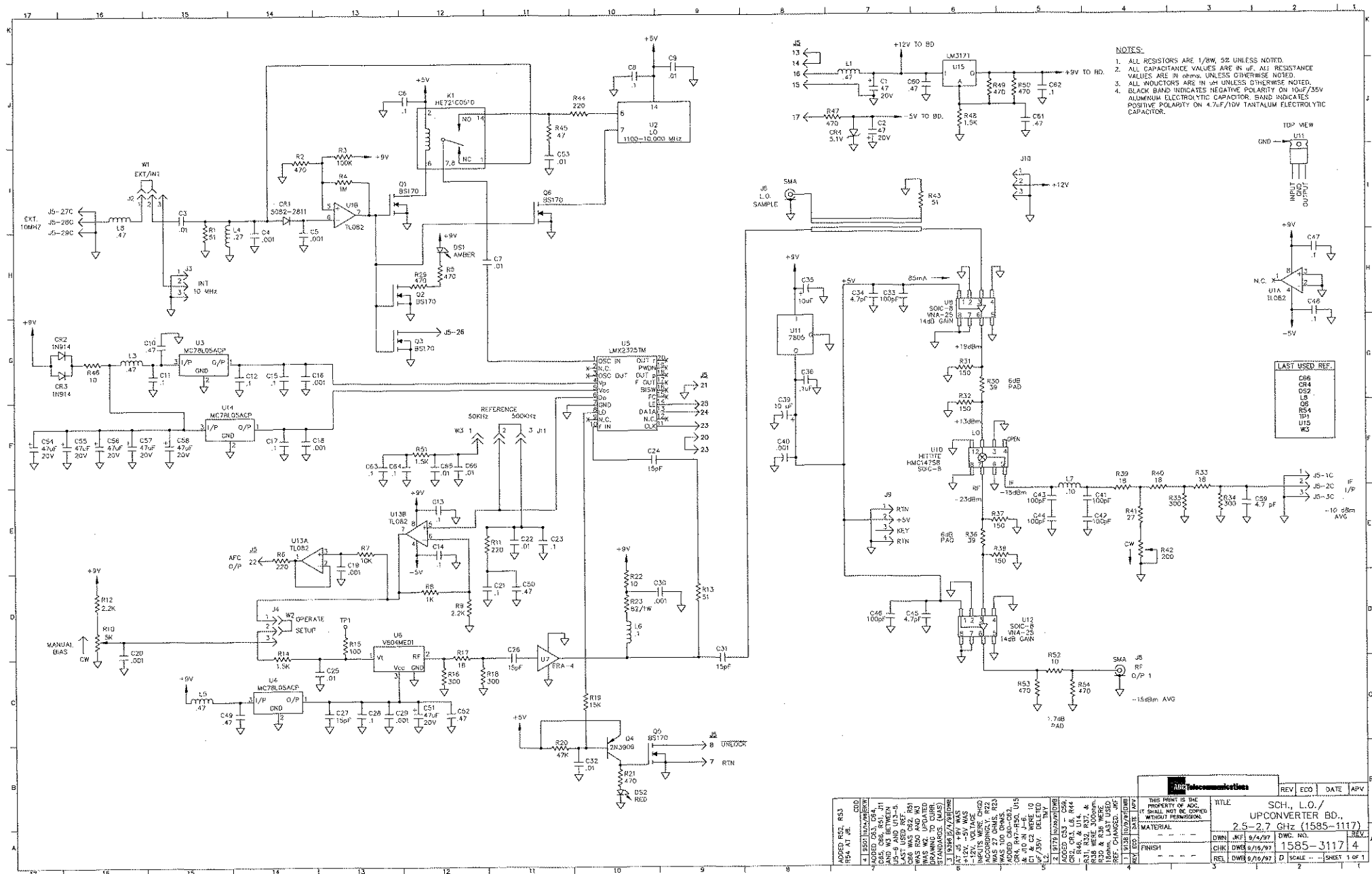
- 1) ALL RESISTORS ARE 1/8W UNLESS OTHERWISE NOTED.
- 2) ALL CAPACITORS ARE IN μF UNLESS OTHERWISE NOTED.
- 3) ALL INDUCTORS ARE IN μH UNLESS OTHERWISE NOTED.

R2 WAS 18 OHMS. R1 & R3
WAS 300 OHMS. (RFB)

ADC Telecommunications

REV	ECO	DATE	APV	THIS PRINT IS THE PROPERTY OF ADC, IT SHALL NOT BE COPIED WITHOUT PERMISSION.				TITLE			
				MATERIAL				SCHEMATIC, SINGLE STAGE AMPLIFIER (1585-1101)			
1	9526	10/13/98	BKW	---	DWN	TMY	7/28/97	DWG. NO.	1585-3101	REV	1
2	ECO	DATE	APV	FINISH	CHK	DWB	8/6/97	SCALE 1=1	SHEET	10F1	
3				---	REL	DWB	8/6/97	B			



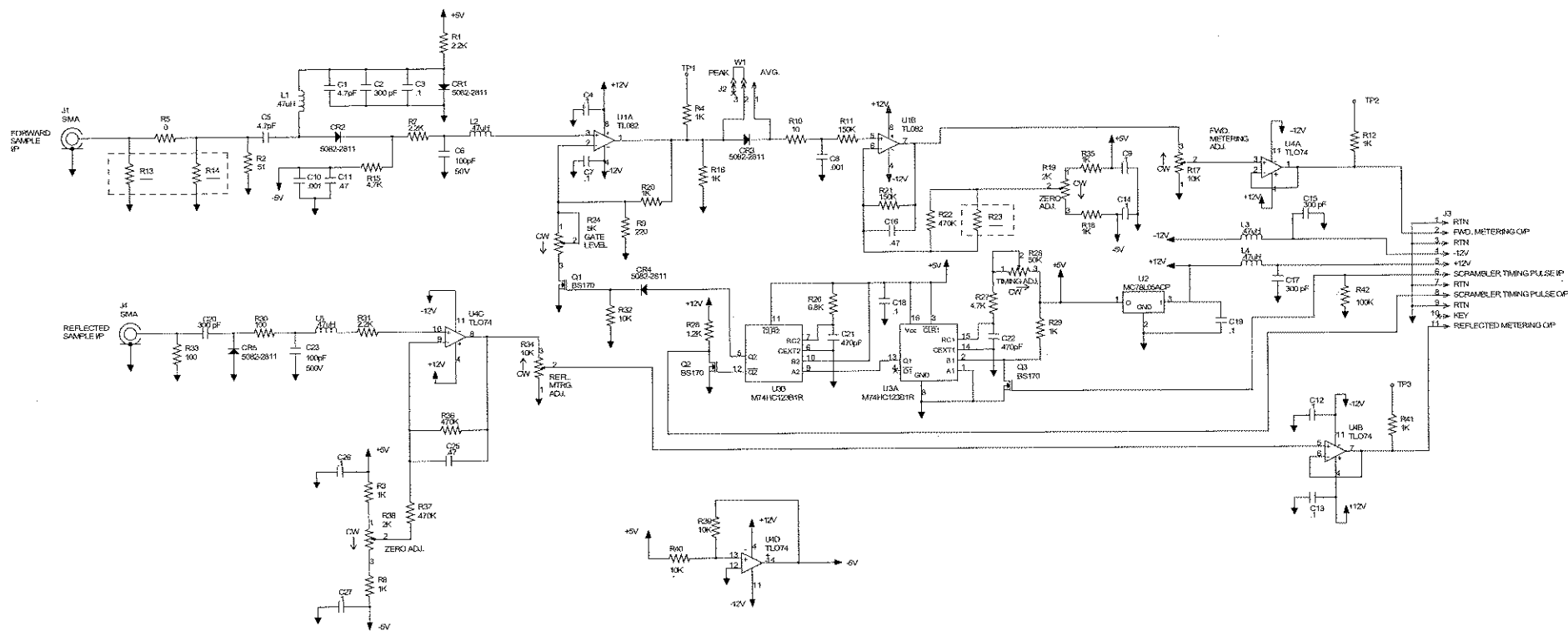


- NOTES:**
1. ALL RESISTORS ARE 1/8W, 5% UNLESS NOTED.
 2. ALL CAPACITANCE VALUES ARE IN μ F, ALL RESISTANCE VALUES ARE IN Ω UNLESS OTHERWISE NOTED.
 3. ALL INDUCTORS ARE IN μ H UNLESS OTHERWISE NOTED.
 4. BLACK BAND INDICATES NEGATIVE POLARITY ON 100 μ F/35V ALUMINUM ELECTROLYTIC CAPACITOR. BAND INDICATES POSITIVE POLARITY ON 4.7 μ F/10V TANTALUM ELECTROLYTIC CAPACITOR.

LAST USED REF.

C66
C64
C52
L8
C8
R54
U11
U15
W3

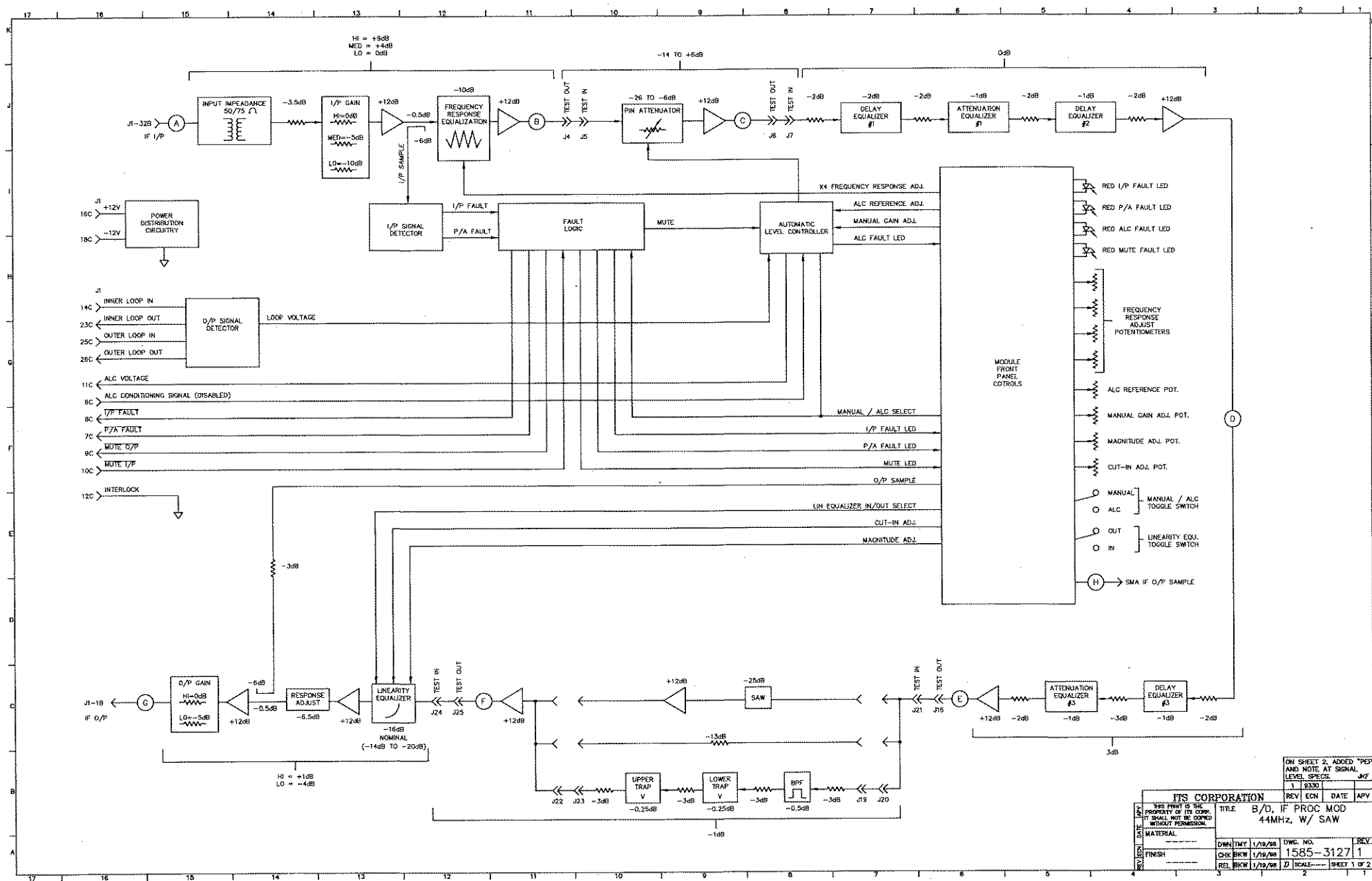
AIRTEC Communications				REV	ECO	DATE	APV
THIS PRINT IS THE PROPERTY OF AIRTEC. IT SHALL NOT BE COPIED OR REPRODUCED WITHOUT PERMISSION.				TITLE			
				SCH. L.O./UPCONVERTER BD., 2.5-2.7 GHz (1585-1117)			
				DWG. NO. 1585-3117.4			
				REV. 1			
				D SCALE			
				SHEET 1 OF 1			



- NOTES:
- 1.) ALL RESISTORS ARE 18W UNLESS OTHERWISE NOTED.
 - 2.) ALL CAPACITORS ARE IN pF UNLESS OTHERWISE NOTED.
 - 3.) ALL INDUCTORS ARE IN uH UNLESS OTHERWISE NOTED.

NOTE: R13, R14 AND R23 ARE NOTE USED ON THIS SCHEMATIC.

ABC Telecommunications				REV	ECO	DATE	APV
THIS PATENT IS THE PROPERTY OF ABC, IT SHALL NOT BE COPIED OR REPRODUCED IN ANY MANNER WITHOUT PERMISSION				TITLE			
SCH. DUAL POWER DETECTOR BD. (1585-1125)				REV			
DRAWN BY: J. L. BROWN				DATE: 10/15/67			
CHECKED BY: J. L. BROWN				DATE: 10/15/67			
DESIGNED BY: J. L. BROWN				DATE: 10/15/67			
APPROVED BY: J. L. BROWN				DATE: 10/15/67			
REVISIONS:				REVISIONS:			
1. R1 WAS 18 OHM				1. R1 WAS 18 OHM			
2. R2 WAS 18 OHM				2. R2 WAS 18 OHM			
3. R3 WAS 18 OHM				3. R3 WAS 18 OHM			
4. R4 WAS 18 OHM				4. R4 WAS 18 OHM			
5. R5 WAS 18 OHM				5. R5 WAS 18 OHM			
6. R6 WAS 18 OHM				6. R6 WAS 18 OHM			
7. R7 WAS 18 OHM				7. R7 WAS 18 OHM			
8. R8 WAS 18 OHM				8. R8 WAS 18 OHM			
9. R9 WAS 18 OHM				9. R9 WAS 18 OHM			
10. R10 WAS 18 OHM				10. R10 WAS 18 OHM			
11. R11 WAS 18 OHM				11. R11 WAS 18 OHM			
12. R12 WAS 18 OHM				12. R12 WAS 18 OHM			
13. R13 WAS 18 OHM				13. R13 WAS 18 OHM			
14. R14 WAS 18 OHM				14. R14 WAS 18 OHM			
15. R15 WAS 18 OHM				15. R15 WAS 18 OHM			
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91. R91 WAS 18 OHM				91. R91 WAS 18 OHM			
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93. R93 WAS 18 OHM				93. R93 WAS 18 OHM			
94. R94 WAS 18 OHM				94. R94 WAS 18 OHM			
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96. R96 WAS 18 OHM				96. R96 WAS 18 OHM			
97. R97 WAS 18 OHM				97. R97 WAS 18 OHM			
98. R98 WAS 18 OHM				98. R98 WAS 18 OHM			
99. R99 WAS 18 OHM				99. R99 WAS 18 OHM			
100. R100 WAS 18 OHM				100. R100 WAS 18 OHM			



ON SHEET 2, ADDED "PEP" AND NOTE AT SIGNAL LEVEL SPEC.			
REV	ECN	DATE	APV
1	9330		
ITS CORPORATION TITLE B/D. IF PROC MOD 44MHz, W/ SAW			
DWG. NO.	1585-3127	REV	1
CHK. BY	1/18/98	REL. BY	1/19/98
D		J	
SCALE		SHEET 1 OF 2	

IF I/P AND O/P SPECIFICATIONS		
SIGNAL	IMPEDANCE	FREQUENCY RANGE
IF I/P J1-32B	50 Ω 5 OHM RETURN LOSS > 15dB	Fc = 44MHz BW = 5 MHz
IF O/P J1-1B	50 OHM	Fc = 44MHz BW = 8 MHz
IF O/P SAMPLE FRONT PANEL	50 OHM	Fc = 44MHz BW = 8 MHz

IF SIGNAL LEVEL SPECIFICATIONS		
CIRCUIT LOCATION	NOMINAL LEVEL (PEP)	OPERATING RANGE (PEP)
A IF I/P	I/P GAIN HI = -17 dBm MED = -12 dBm LO = -7 dBm	I/P GAIN HI = -22 TO -12 dBm MED = -17 TO -7 dBm LO = -12 TO -2 dBm
B	-8 dBm	-13 TO -3 dBm
C	-9 dBm	-16 TO -6 dBm
D	-9 dBm	-16 TO -6 dBm
E	-6 dBm	-13 TO -3 dBm
F	-7 dBm	-14 TO -4 dBm
G O/P	O/P GAIN HI = -8 dBm LO = -11 dBm	O/P GAIN HI = -13 TO -3 dBm LO = -18 TO -8 dBm
H O/P SAMPLE	-27 dBm	-34 TO -16 dBm

NOTE: ALL POWER LEVELS ARE IN TERMS OF PEP. THE AVERAGE POWER FOR A QAM SIGNAL IS 6dB LOWER THAN THE PEP.

LOGIC SIGNALS		
SIGNAL	OPERATING RANGE	OPERATING CONDITIONS
P/A FAULT O/P J1-7C	LOW IMPEDANCE = FAULT HIGH IMPEDANCE = NO FAULT	FAULT CONDITION OCCURS WHEN J30 IS PLACED INTO THEN "IN" POSITION AND THE IF I/P SIGNAL IS 1 dB OR LESS BELOW THE PEAK LEVEL OF THE IF I/P SIGNAL AND NO I/P FAULT CONDITION EXISTS.
I/P FAULT O/P J1-8C	LOW IMPEDANCE = FAULT HIGH IMPEDANCE = NO FAULT	FAULT CONDITION OCCURS WHEN THE MODULE IS PLACED INTO THE ALC MODE AND THE DETECTED I/P LEVEL FALLS BELOW THE SPECIFIED I/P RANGE.
MUTE O/P J1-9C	LOW IMPEDANCE = MUTE HIGH IMPEDANCE = NO MUTE	MUTING OCCURS WHEN THE MODULE IS PLACED INTO THE ALC MODE AND WHEN EITHER AN I/P FAULT OR P/A FAULT OR EXTERNAL MUTE I/P SIGNAL IS ACTIVE.
MUTE I/P J1-10C	0V = ACTIVATE MUTE +12V = DEACTIVATE MUTE	MUTE I/P IS CONTROLLED EXTERNALLY TO THE MODULE.
INTERLOCK O/P J1-12	0V	TIES THE INTERLOCK LINE IN THE TRANSMITTER TO GROUND INDICATING THAT THE MODULE IS PRESENT.

ANALOG SIGNALS	
SIGNAL	OPERATING RANGE
INNER LOOP IN J1-24C	0 TO 9V DC 1V = 100%
INNER LOOP OUT J1-23C	0 TO 9V DC 1V = 100%
OUTER LOOP IN J1-25C	0 TO 9V DC 1V = 100%
OUTER LOOP OUT J1-26C	0 TO 9V DC 1V = 100%
ALC VOLTAGE O/P J1-11C	0 TO 12V DC 100 OHM O/P IMPEDANCE

LED SIGNALS		
SIGNAL	OPERATING RANGE	OPERATING CONDITIONS
P/A FAULT LED RED	ILLUMINATED = FAULT EXTINGUISHED = NO FAULT	FAULT CONDITION OCCURS WHEN J30 IS PLACED INTO THEN "IN" POSITION AND THE IF I/P SIGNAL IS 1 dB OR LESS BELOW THE PEAK LEVEL OF THE IF I/P SIGNAL AND NO I/P FAULT CONDITION EXISTS.
I/P FAULT LED RED	ILLUMINATED = FAULT EXTINGUISHED = NO FAULT	FAULT CONDITION OCCURS WHEN THE DETECTED I/P LEVEL FALLS BELOW THE SPECIFIED I/P RANGE.
ALC FAULT LED RED	ILLUMINATED = FAULT EXTINGUISHED = NO FAULT	FAULT CONDITION OCCURS WHEN THE ALC VOLTAGE EXCEEDS +8 VOLTS.
MUTE LED RED	ILLUMINATED = FAULT EXTINGUISHED = NO FAULT	MUTING OCCURS WHEN THE MODULE IS PLACED INTO THE ALC MODE AND WHEN EITHER AN I/P FAULT OR P/A FAULT OR EXTERNAL MUTE I/P SIGNAL IS ACTIVE.

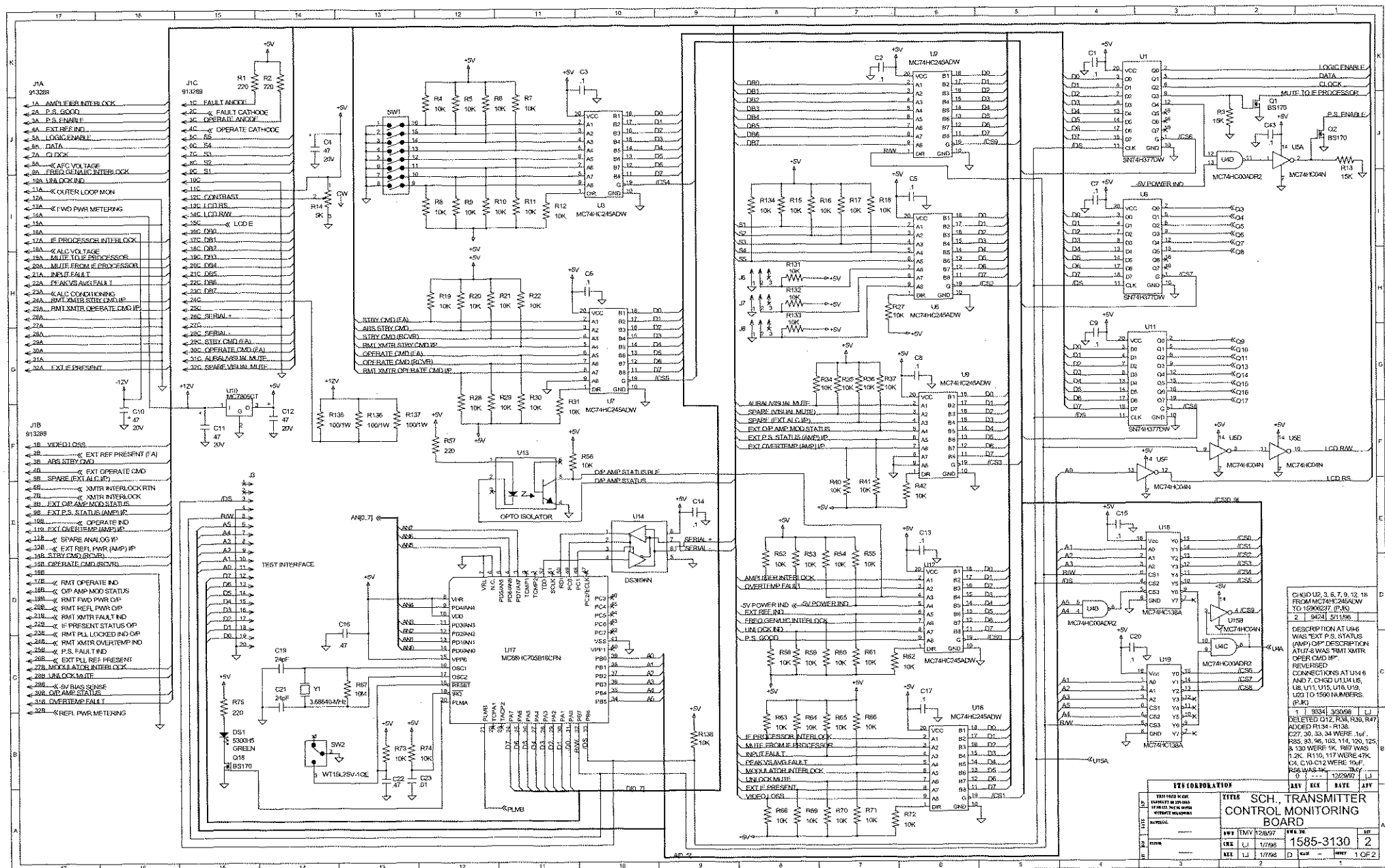
POWER SUPPLY LINES	
SUPPLY LINE	CURRENT DRAW
+12 VOLTS	LESS THAN 800mA
-12 VOLTS	LESS THAN 100mA

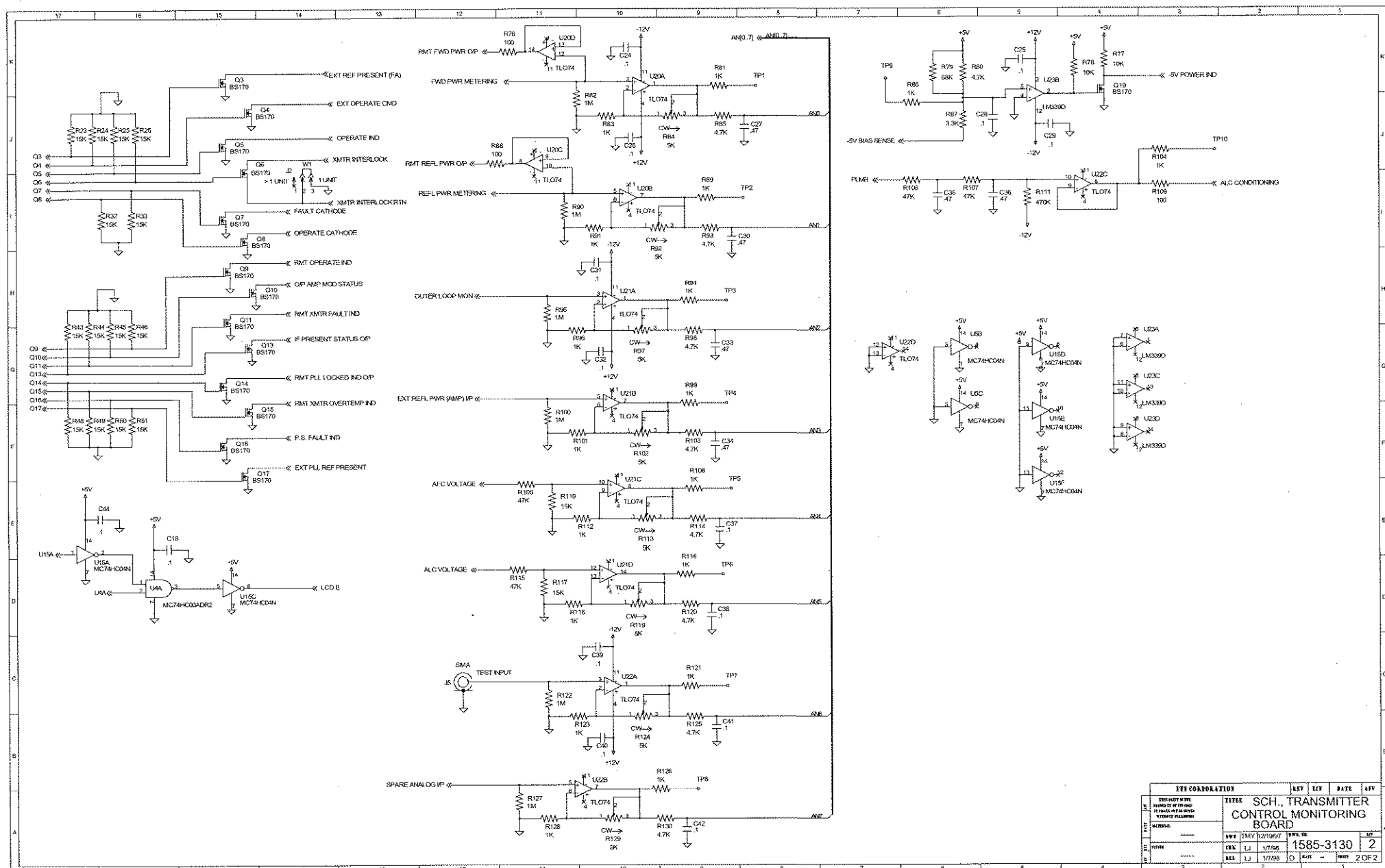
DELAY EQUALIZER SPECIFICATIONS				
EQUALIZER	CENTER FREQUENCY	0.2 DB RIPPLE BANDWIDTH	DELAY	USAGE
DELAY AND ATTENUATION EQUALIZER #1	44 MHz	8 MHz	60 nsec	USED WITH ADJACENT AND NONADJACENT DIGITAL SYSTEM AS WELL AS ADJACENT ANALOG SYSTEMS.
DELAY EQUALIZER #2	44 MHz	8 MHz	20 nsec	USED WITH THE LUMPED ELEMENT BANDPASS FILTER ALSO ON THIS MODULE.
DELAY AND ATTENUATION EQUALIZER #3	42 MHz	8 MHz	48 nsec	USED WITH ADJACENT AND NONADJACENT ANALOG SYSTEMS.

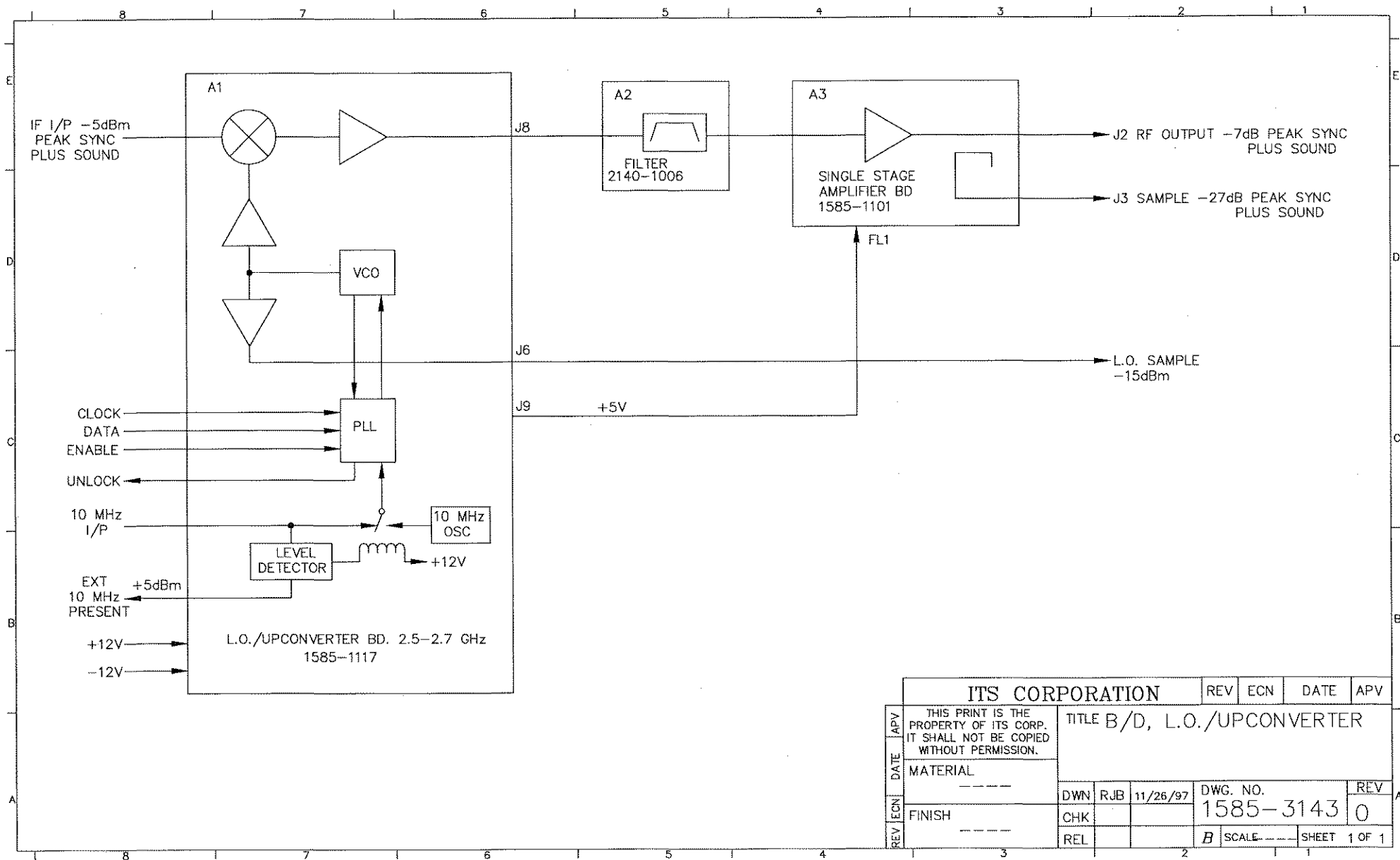
FILTER SPECIFICATIONS				
FILTER	CENTER FREQUENCY	0.2 DB RIPPLE BANDWIDTH	REJECTION AT Fc +/- 8 MHz	REJECTION AT Fc +/- 8 MHz
BPF	44 MHz	8 MHz	<0.2 dB	>15 dB
SAW	44 MHz	8 MHz	>20 dB	>70 dB

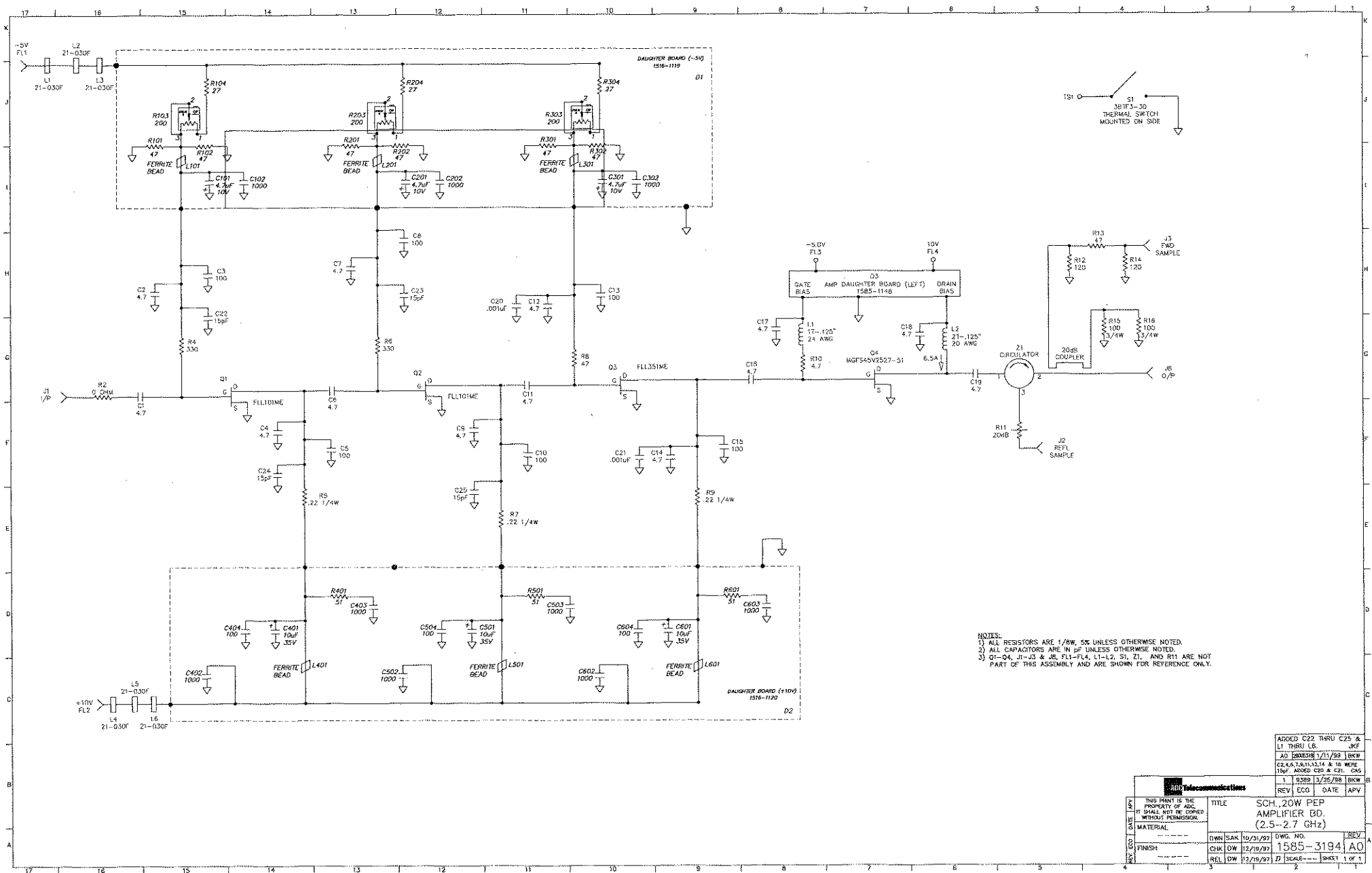
ALC SPECIFICATIONS	
PIN ATTENUATOR GAIN	ALC VOLTAGE
-8	1.25
-11	0.90
-16	0.76
-21	0.67
-26	0.61

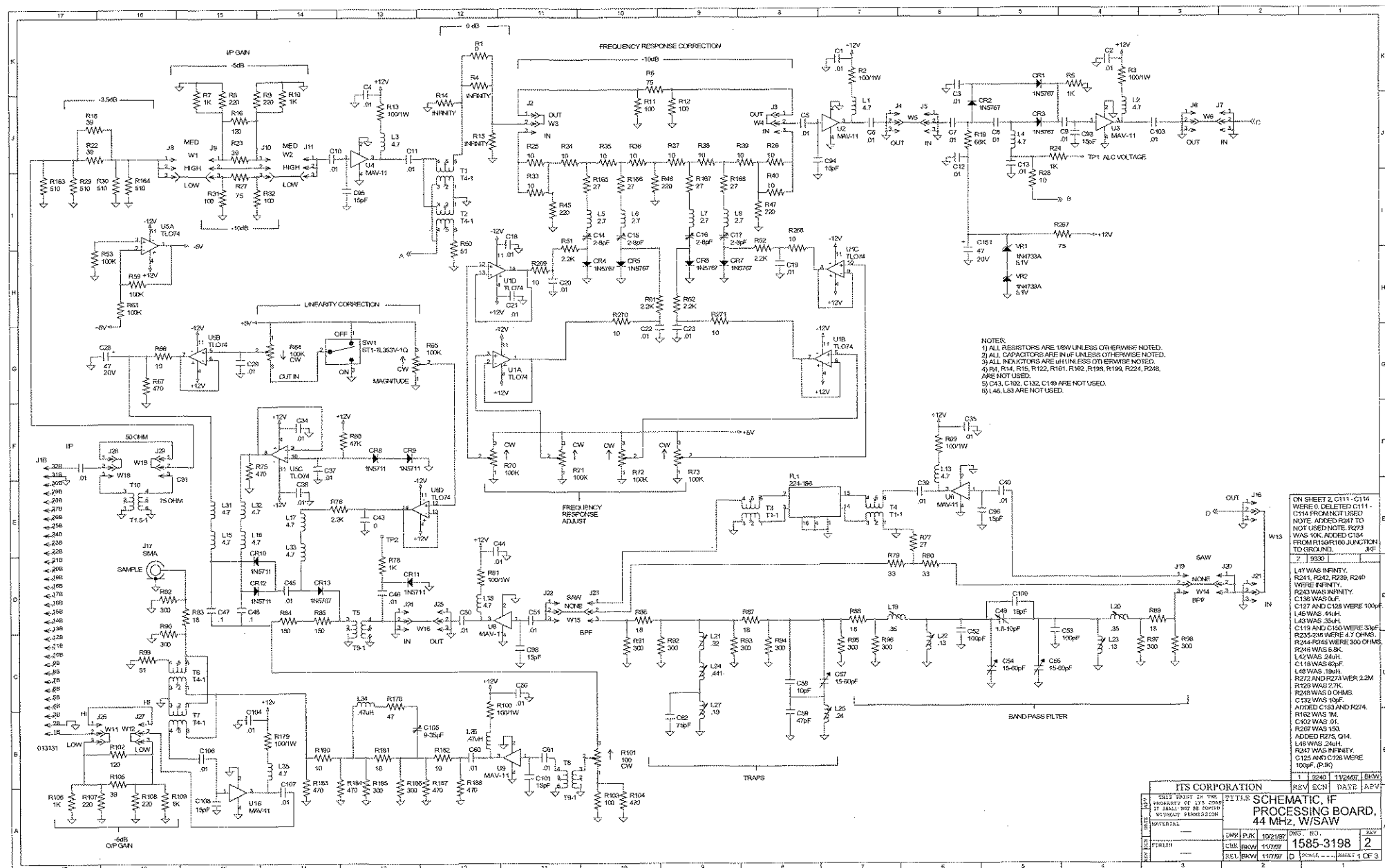
ITS CORPORATION		REV	ECN	DATE	APV
THIS PRINT IS THE PROPERTY OF ITS CORP. IT SHALL NOT BE COPIED WITHOUT PERMISSION.		TITLE B/D, IF PROC MOD 44MHz, W/ SAW			
MATERIAL		OWN	TIME	1/16/88	DWG. NO. 1585-3127
FINISH		CHK	ECN	1/16/88	REV
REL		ECN	1/16/88	D SCALE	SHEET 2 OF 2

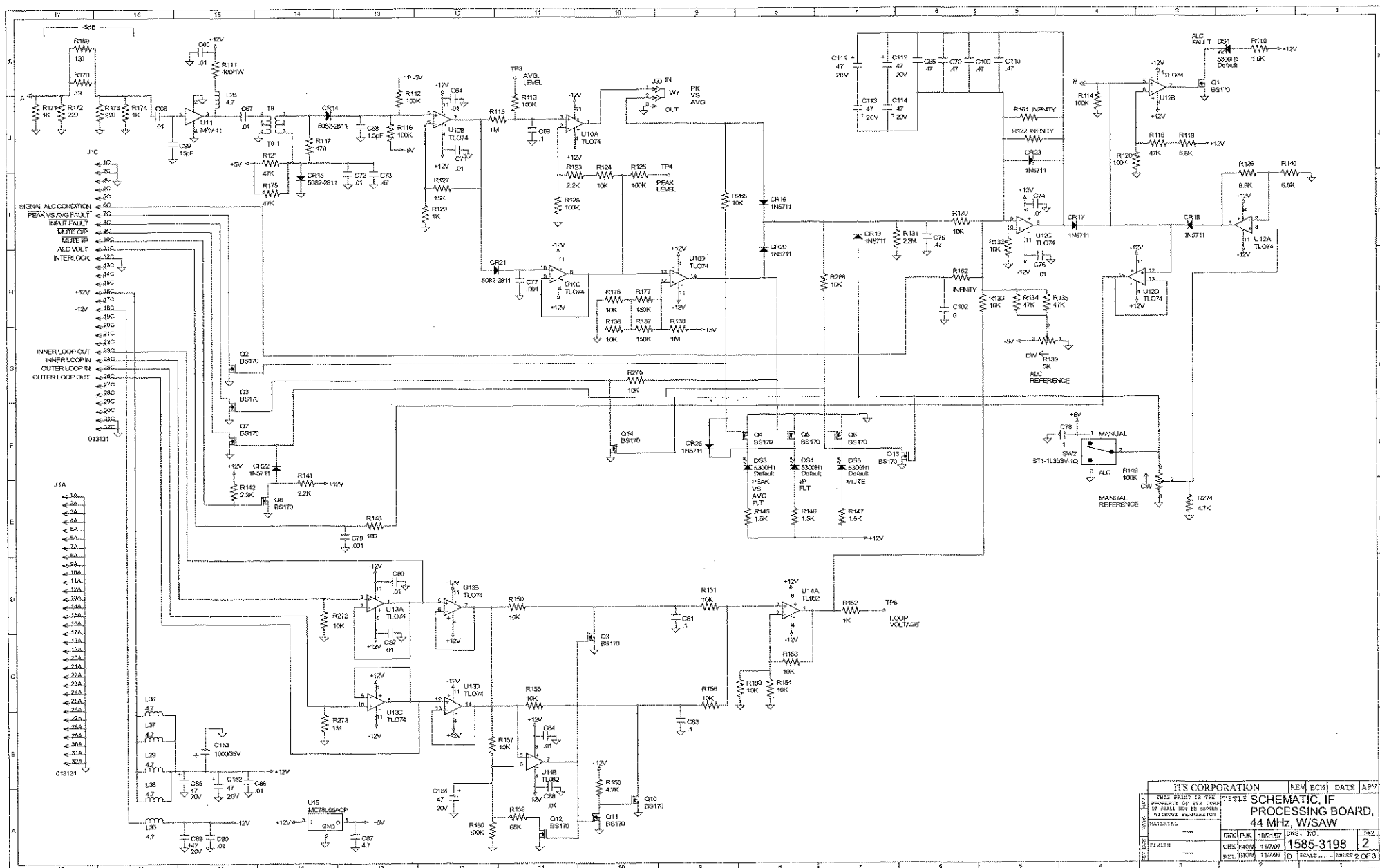


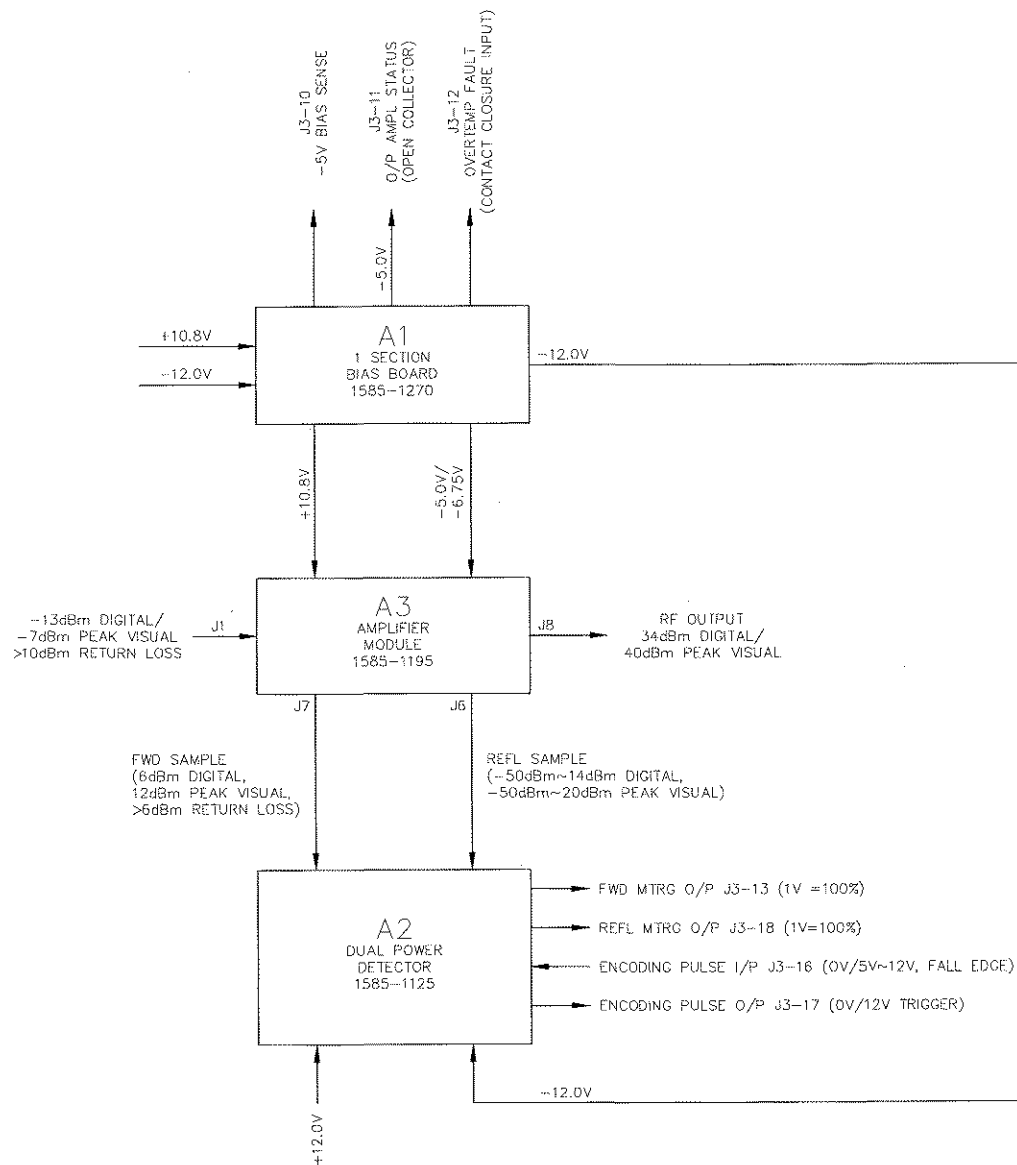




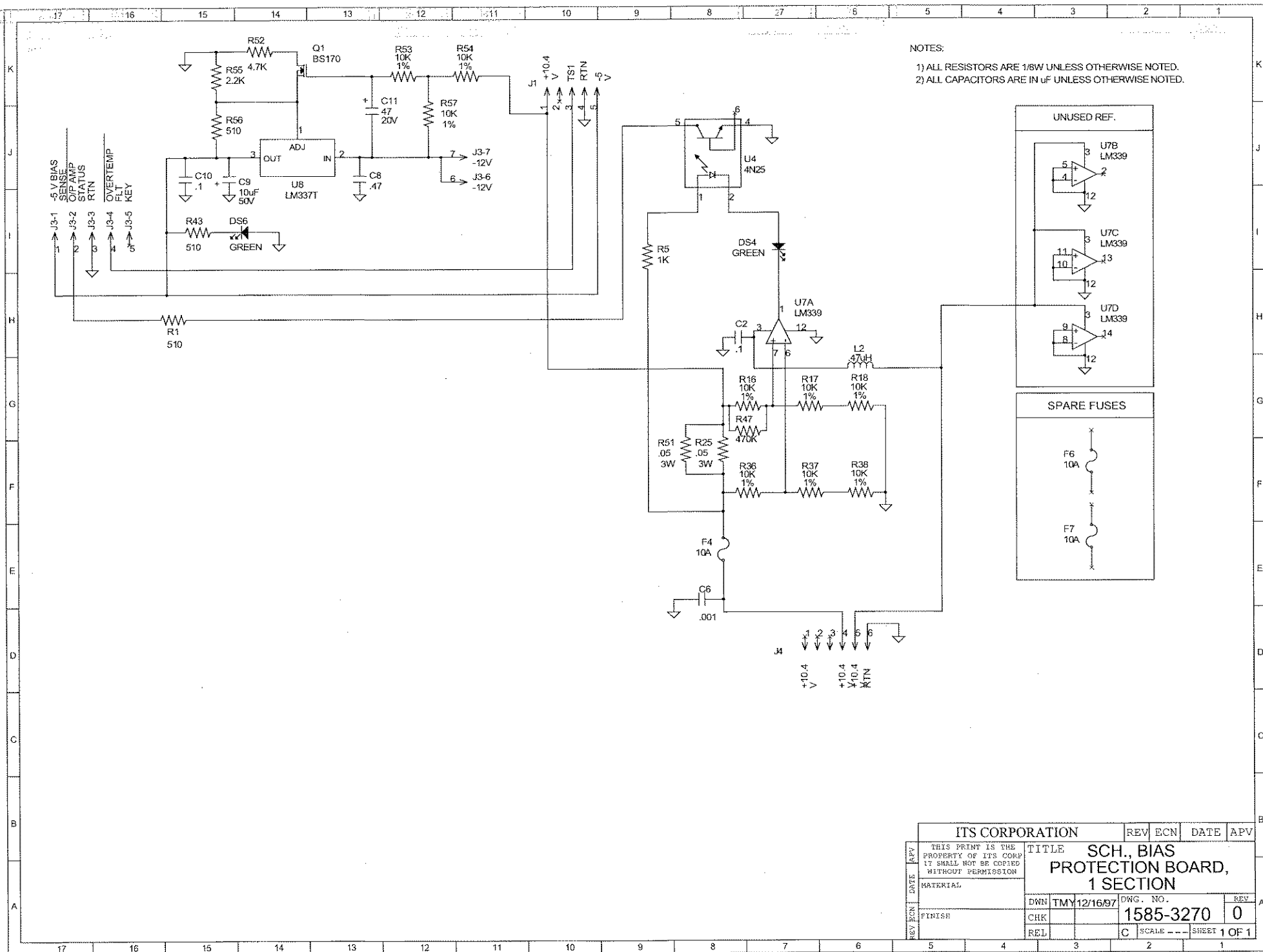




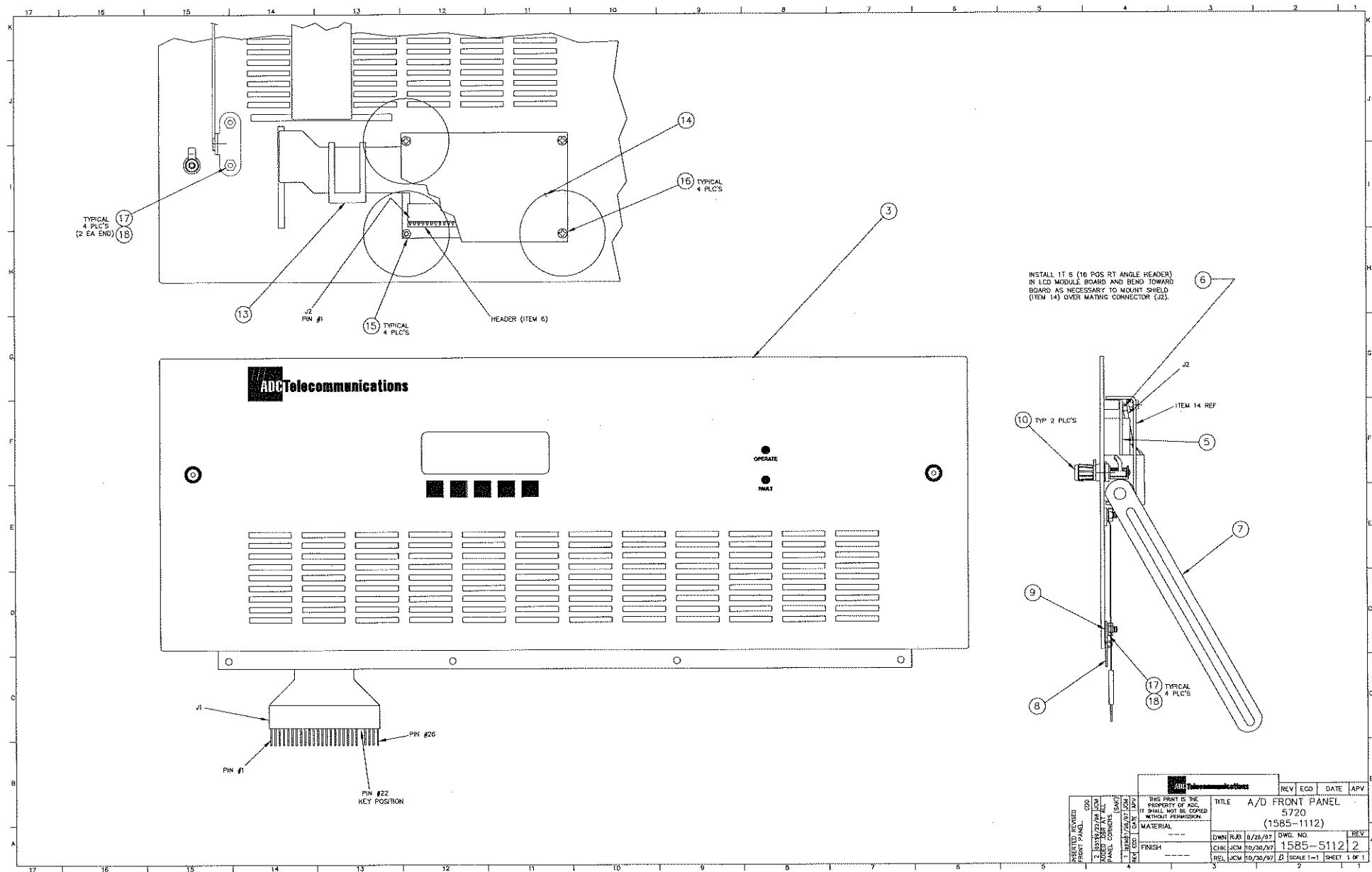




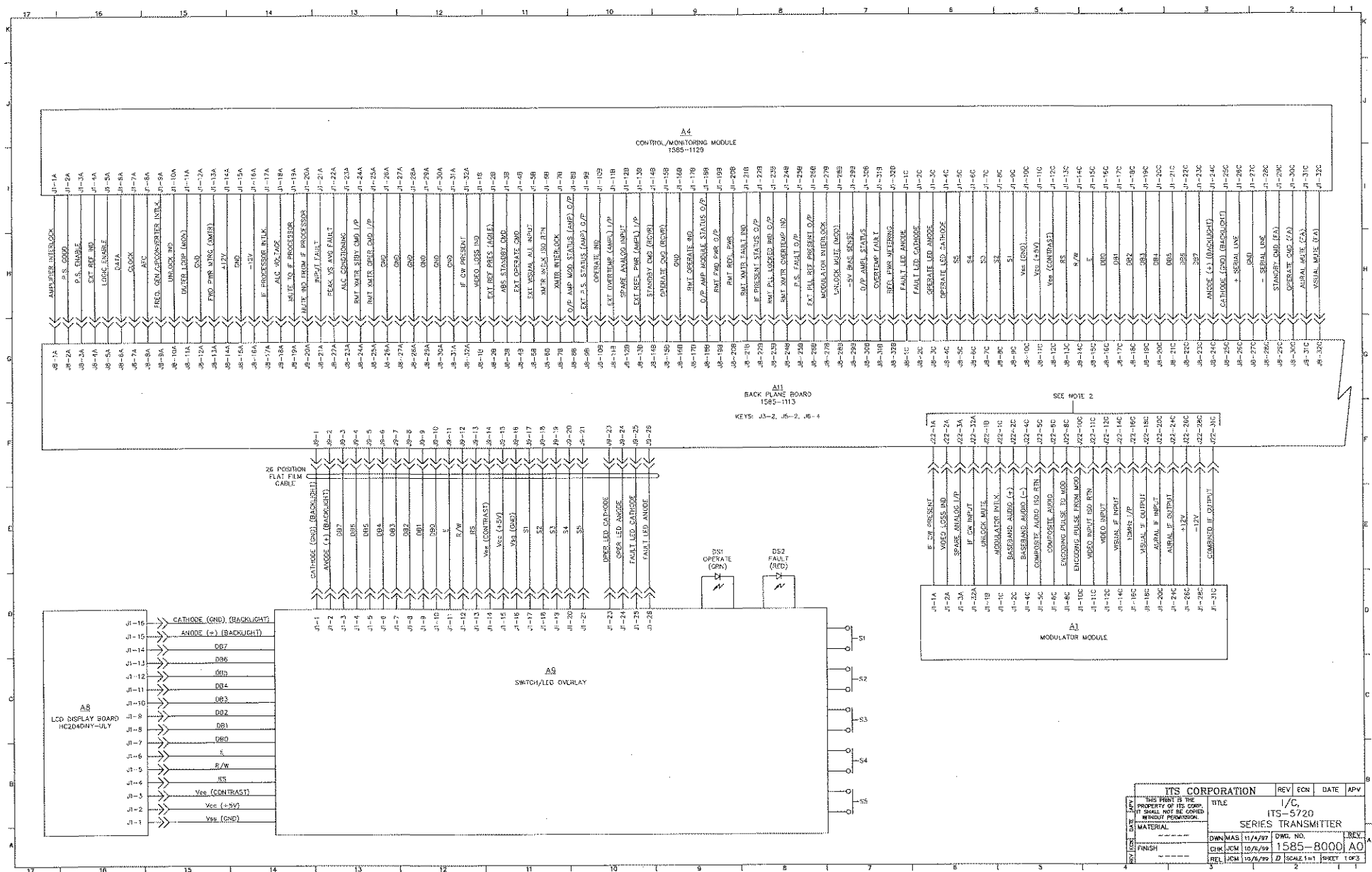
REV		ECN		DATE		APV	
THIS PRINT IS THE PROPERTY OF ITS CORP. IT SHALL NOT BE COPIED WITHOUT PERMISSION. MATERIAL FINISH ITS CORPORATION TITLE B/D, AMPL ASSY, 20W PEP, 2.50-2.70 GHz (1585-1236) DWN MAS12/22/97 CHK REL DWG. NO. 1585-3236 SCALE 1=1 REV 0 SHEET 1 OF 1							

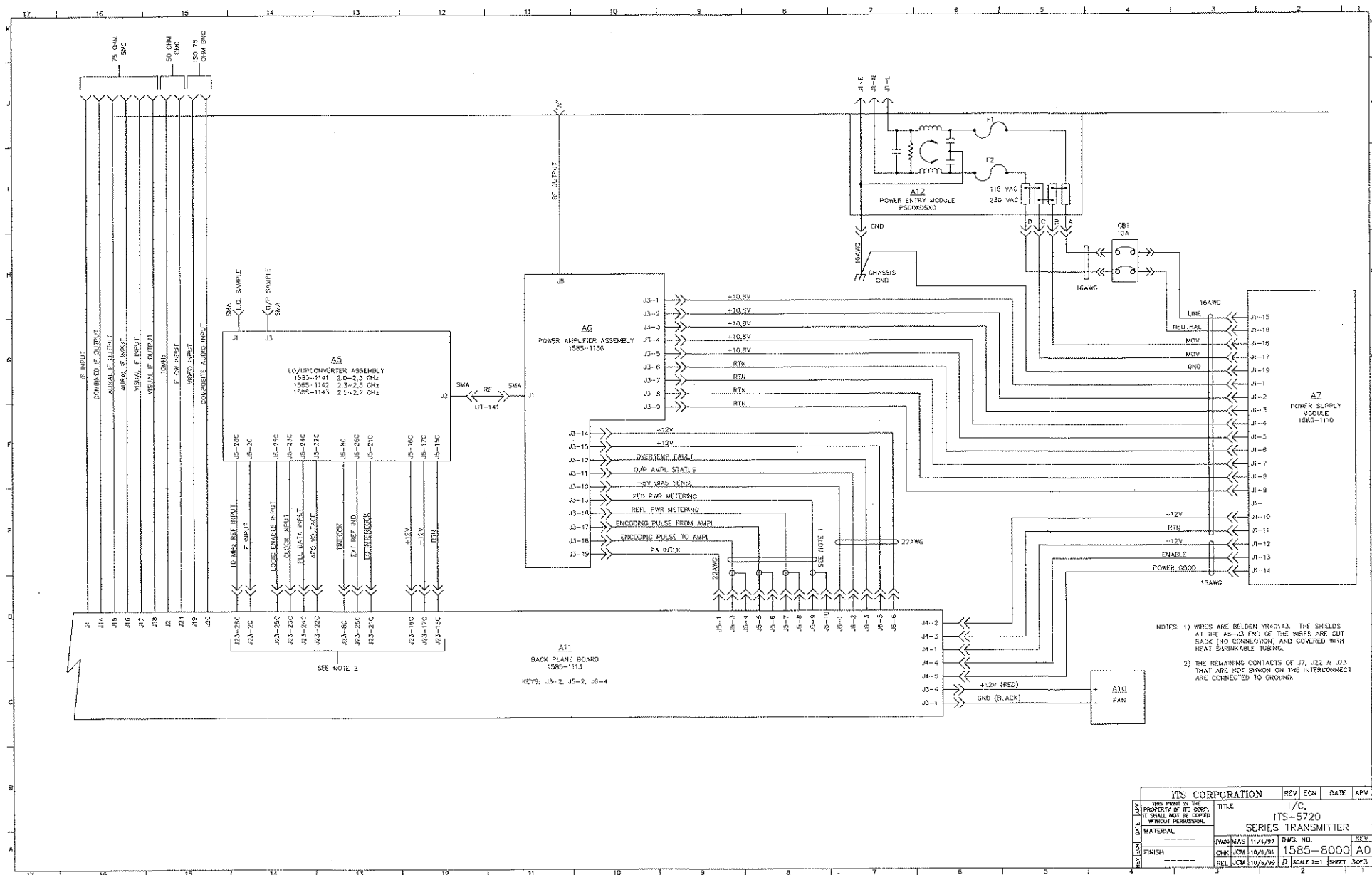


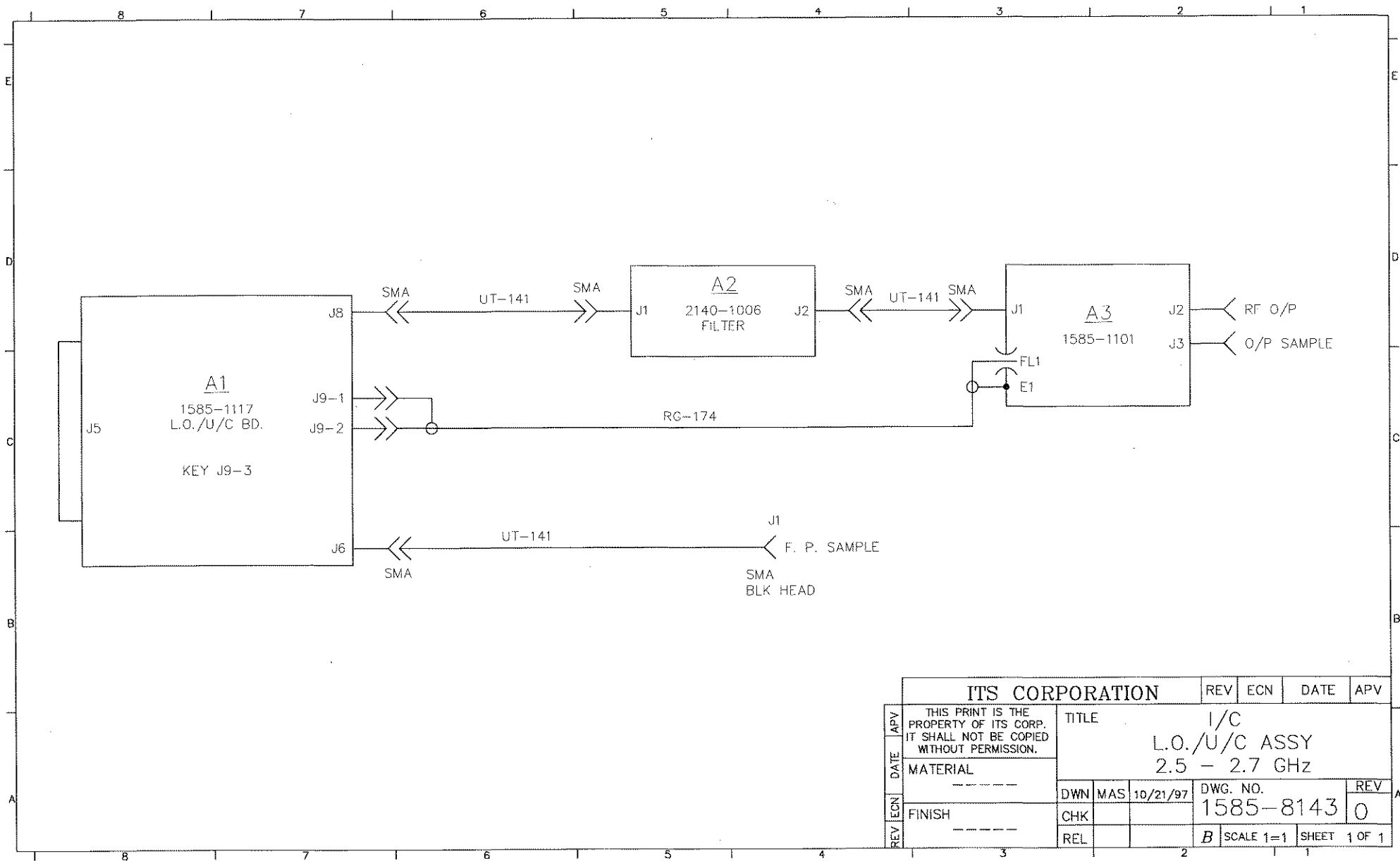
REV		ECN		DATE		APV	
THIS PRINT IS THE PROPERTY OF ITS CORP. IT SHALL NOT BE COPIED WITHOUT PERMISSION		TITLE		SCH., BIAS PROTECTION BOARD, 1 SECTION		DWG. NO.	
MATERIAL		DWN		TMY 12/16/97		REV	
FINISH		CHK		REL		1585-3270 0	
REL		C		SCALE ---		SHEET 1 OF 1	



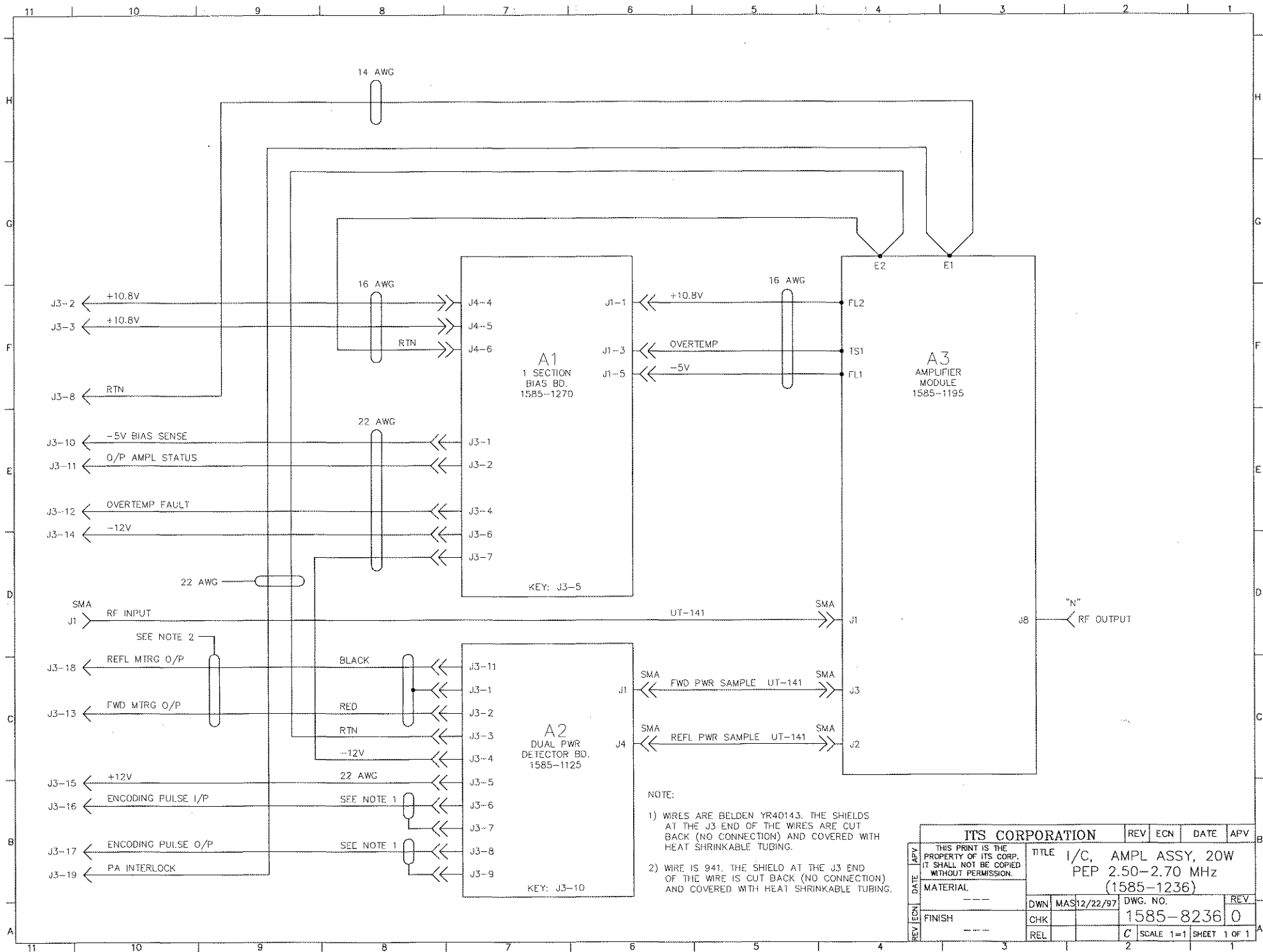
ADC Telecommunications				REV	ECO	DATE	APV
THIS PRINT IS THE PROPERTY OF ADC. IT SHALL NOT BE COPIED WITHOUT PERMISSION.				TITLE			
A/D FRONT PANEL				5720			
(1585-1112)				DWG. NO.			
1585-5112				2			
CHK LCM 10/30/97				REL LCM 10/30/97			
D				SCALE 1=1			
SHEET 1 OF 1							





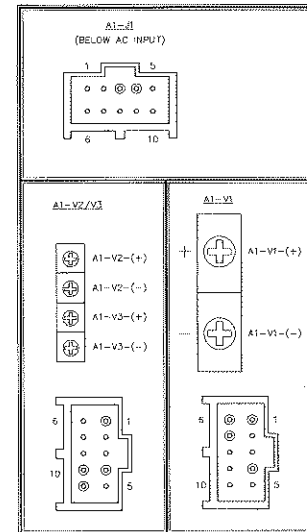
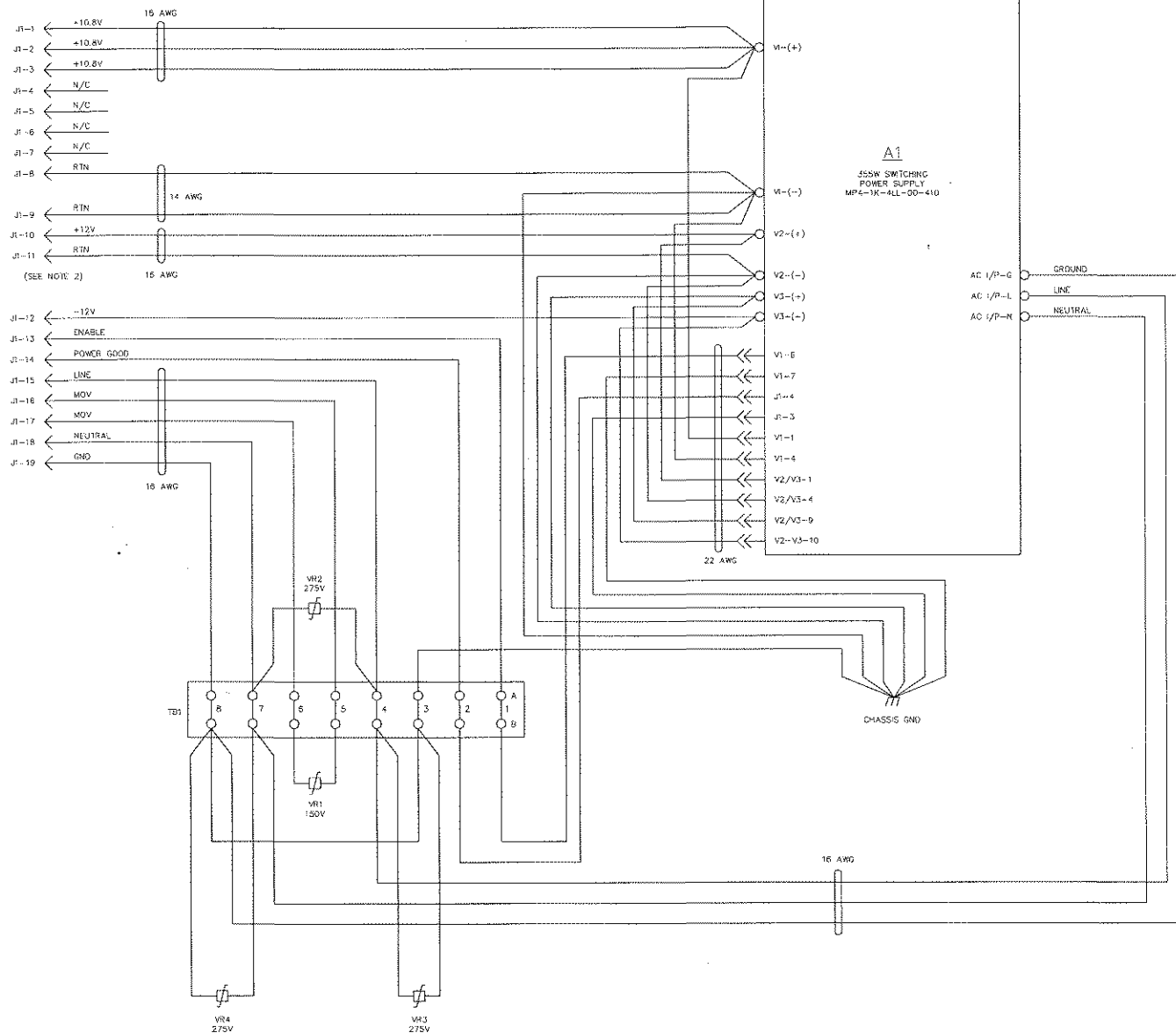


ITS CORPORATION				REV	ECN	DATE	APV
THIS PRINT IS THE PROPERTY OF ITS CORP. IT SHALL NOT BE COPIED WITHOUT PERMISSION.				TITLE			
				I/C L.O./U/C ASSY 2.5 - 2.7 GHz			
REV	ECN	DATE	APV	DWN	MAS	10/21/97	DWG. NO.
FINISH				CHK			1585-8143
				REL			0
				B SCALE 1=1 SHEET 1 OF 1			



ITS CORPORATION				REV	ECN	DATE	APV
THIS PRINT IS THE PROPERTY OF ITS CORP. IT SHALL NOT BE COPIED WITHOUT PERMISSION.				TITLE I/C, AMPL ASSY, 20W PEP 2.50-2.70 MHz (1585-1236)			
MATERIAL				DWN	MAS12/22/97	DWG. NO.	REV
FINISH				CHK		1585-8236	0
REL				C	SCALE 1=1	SHEET 1 OF 1	A

A2
19 POSITION MERTIMATE
CONNECTOR, RECEPTICAL
208209-2

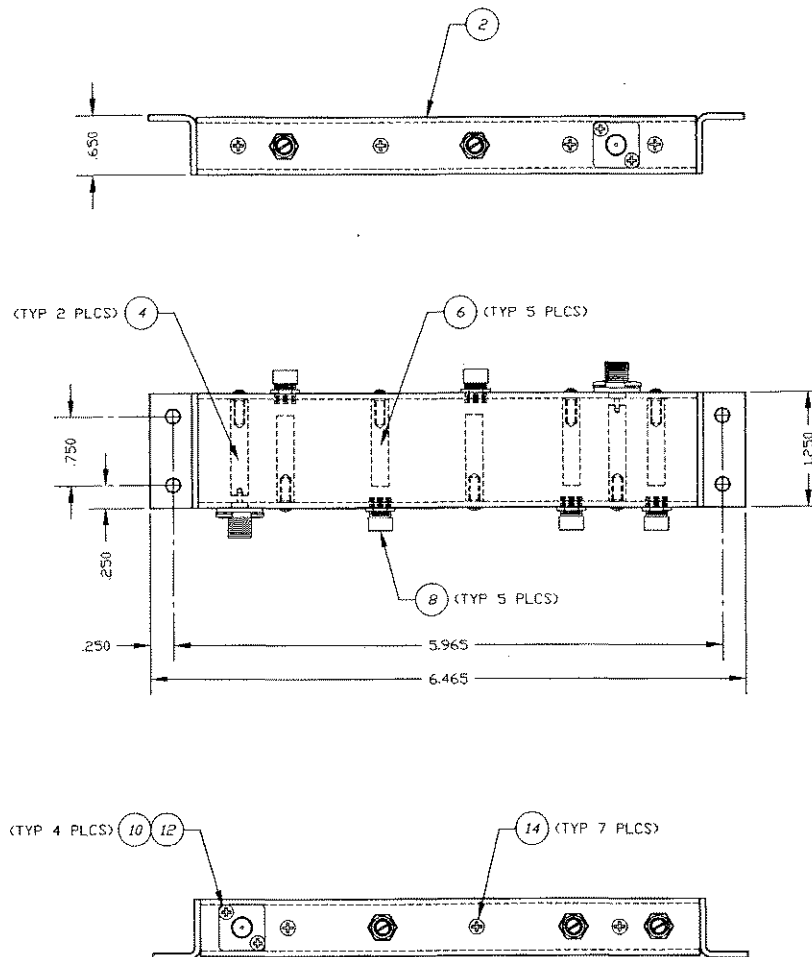


NOTE:

- 1) ALL SINGLE WIRE IS 18AWG UNLESS OTHERWISE NOTED.
- 2) A2-J1-11 MUST BE EQUIPPED WITH LONGER GROUND PIN. (MAKE FIRST-BREAK LAST)

RENAMED DRAWING FROM
1585-8248 TO
1585-8248. ADDED 6
Wires AT A1-V1-1 & 4
AND V2/V3-1, 4, 9 AND
10. ADDED A1-V2/V3
ILLUSTRATIONS. (MAS)

ITS CORPORATION				REV	ECN	DATE	APV
TITLE				1	5372		
POWER SUPPLY MODULE, 355W							
MATERIAL				DWN	RFB	12/30/97	DWG. NO.
FINISH				CHK	SRB	1/15/98	1585-8248
				REL	SRB	1/15/98	SCALE 1=1
				SHEET 1 OF 1			



ALL DIMENSIONS IN INCHES
UNLESS OTHERWISE NOTED.
TOLERANCES UNLESS
OTHERWISE NOTED.
XX ± 0.2 FRAC $\pm 1/64$
XXX ± 0.05 ANG $\pm 0^\circ 30'$
BREAK ALL SHARP EDGES
DO NOT SCALE DRAWING

ITS CORPORATION				TITLE			
REV	ECN	DATE	APV	A/D, 4 SECT BANDPASS FILTER ITFS			
DVN	RFB	7/27/95	DWG. NO.	REV			
CHK	SEB	7/27/95	2140-5006	3			
REL	SEB	7/27/95	C	SCALE 1=1 SHEET 1 OF 1			

ADDED DIM'S TO A/D TO SHOW POSITION OF MOUNTING HOLES. (RFB)			
3	F170	11/29/97	SEB
CHANGED A/D TO ADD TRAP. CHANGED BALLON QTY'S. (RFB)			
2	F083	11/30/95	SEB
MADE EXTENSIVE CHANGES TO ADD NEW V/A DWG & S/A DWG. (RFB)			
1	F070	10/27/95	SEB